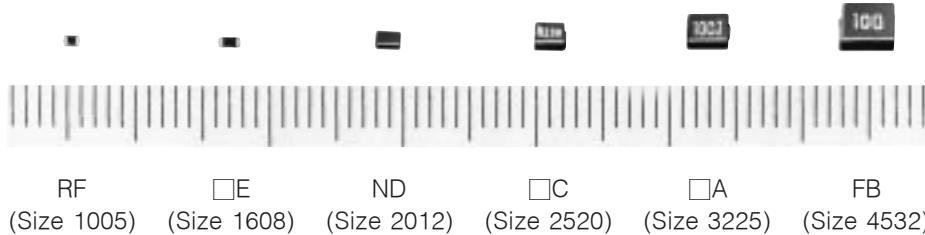


### Chip Inductors

Japan

#### Series: Chip

Type: **RF, RE, ND,  
NC, NA, FC,  
FA, FB, SA,  
PE, PC, PA,  
EA**



Non winding (RF,  E) and wire wound type chip inductors for automatic mounting and high-density mounting

Industrial Property: Patents 6 (incl. pending)

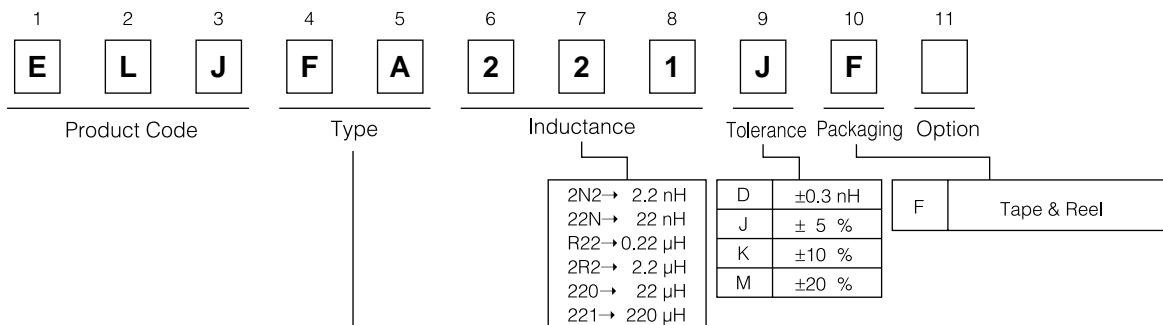
#### ■ Features

- High Q
- Good for mounting
- Wide allowable range (1.0 nH to 1000  $\mu$ H)

#### ■ Recommended Applications

- CTV, VTR, HIC, HDD, FDD, Cordless telephones, Portable telephones  
Pagers, Video cameras

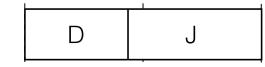
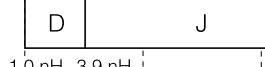
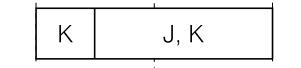
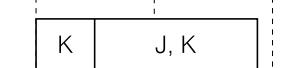
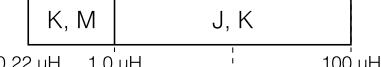
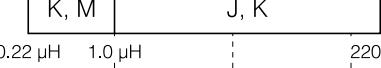
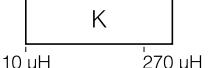
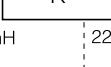
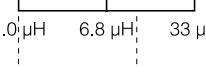
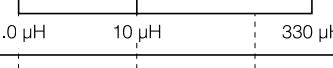
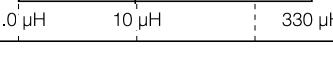
#### ■ Explanation of Part Numbers



Styles Types	F 1005 (0402)	E 1608 (0603)	D 2012 (0805)	C 2520 (1008)	A 3225 (1210)	B 4532 (1812)
Non Magnetic Core	RF	RE	ND	NC	NA	-
Regular	-	-	-	FC	FA	FB
Shield	-	-	-	-	SA	-
High Power	-	PE	-	PC	PA	-
Low DC resistance	-	-	-	-	EA	-

Size unit: mm

### ■ Inductance, Size Guide

	Type NAME	L VALUE						Features
		0.001	0.01	0.1	1.0	10	100	( $\mu$ H) 1000
Non Magnetic Core	1005 (0402) RF		1.0 nH 6.8 nH 100 nH					
	1608 (0603) RE		1.0 nH 3.9 nH 220 nH					
	2012 (0805) ND		10 nH 33 nH 1000 nH					
	2520 (1008) NC		10 nH 33 nH 820 nH					
	3225 (1210) NA		0.047 $\mu$ H 0.22 $\mu$ H 1.0 $\mu$ H 8.2 $\mu$ H					
Regular	2520 (1008) FC		0.22 $\mu$ H 1.0 $\mu$ H 100 $\mu$ H					
	3225 (1210) FA		0.22 $\mu$ H 1.0 $\mu$ H 220 $\mu$ H					
	3225 (1210) SA Mag. shield		10 $\mu$ H 270 $\mu$ H					
	4532 (1812) FB		100 $\mu$ H 1000 $\mu$ H					
High Power	1608 (0603) PE <b>NEW</b>		2.2 nH 22 nH					
	2520 (1008) PC		1.0 $\mu$ H 6.8 $\mu$ H 33 $\mu$ H					
	3225 (1210) PA		1.0 $\mu$ H 10 $\mu$ H 330 $\mu$ H					
Low DC resistance	3225 (1210) EA <b>NEW</b>		1.0 $\mu$ H 10 $\mu$ H 330 $\mu$ H					Low DC resistance

Size unit : mm

### 1. Non Magnetic Core Types RF, RE, ND, NC, NA

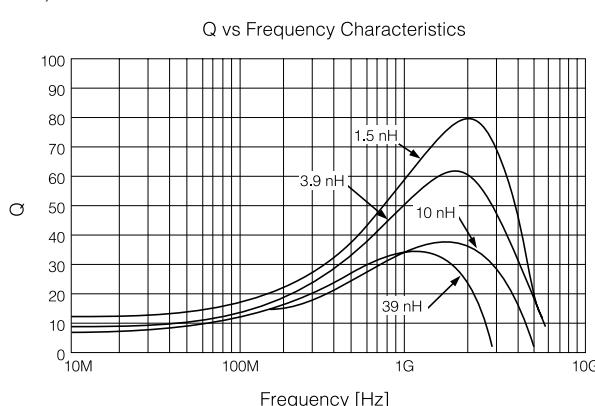
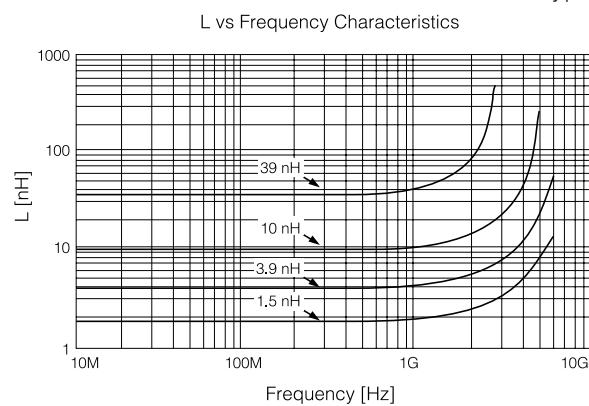
#### ■ Examples : Type 1005(0402)RF

Part No.	Inductnce		Q min.	L,Q Test-Freq. (MHz)	Q Typical (800 MHz)	SRF.*1 min.(MHz)	DCR.*2 max.(Ω)	DC current max.(mA)
	nH	Tolerance						
ELJRF1N0DF2	1.0	$\pm 0.3 \text{ nH}$	8	100	21	6000	0.05	400
ELJRF1N2DF2	1.2				21	6000	0.06	400
ELJRF1N5DF2	1.5				21	6000	0.07	400
ELJRF1N8DF2	1.8				21	6000	0.08	400
ELJRF2N2DF2	2.2				21	6000	0.09	400
ELJRF2N7DF2	2.7				21	5500	0.10	400
ELJRF3N3DF2	3.3				21	5500	0.12	400
ELJRF3N9DF2	3.9				20	5200	0.15	360
ELJRF4N7DF2	4.7				20	4800	0.17	360
ELJRF5N6DF2	5.6				20	4600	0.19	340
ELJRF6N8JF2	6.8				19	4000	0.30	320
ELJRF8N2JF2	8.2				19	3500	0.35	320
ELJRF10NJF2	10				19	2800	0.41	320
ELJRF12NJF2	12				19	2800	0.45	320
ELJRF15NJF2	15				19	2500	0.60	240
ELJRF18NJF2	18				19	2200	0.70	240
ELJRF22NJF2	22				19	2000	0.80	200
ELJRF27NJF2	27				19	1800	1.2	200
ELJRF33NJF2	33				18	1800	1.4	170
ELJRF39NJF2	39				18	1800	1.7	150
ELJRF47NJF2	47				17	1800	2.1	140
ELJRF56NJF2	56				17	1500	2.5	130
ELJRF68NJF2	68				15	1500	4.0	120
ELJRF82NJF2	82				15	1400	4.5	110
ELJRFR10JF2	100				14	1200	5.5	90

\*1 : Self Resonant Frequency \*2 : DC Resistance

#### ■ Performance Characteristics

Type: 1005 (0402) RF



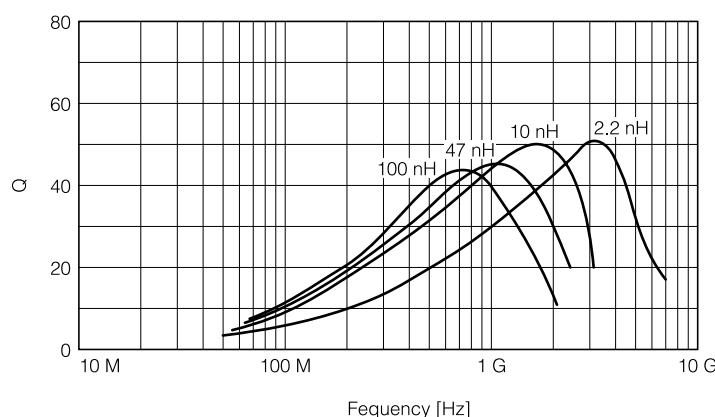
### ■ Examples : Type 1608(0603)RE

Part No.	Inductance		Q min.	L , Q Test-Freq. ( MHz)	Q Typical (800 MHz)	SRF *1 min.(MHz)	DCR *2 max.(Ω)	DC Current max.(mA)			
	nH	Tolerance									
ELJRE1N0DF2	1.0	$\pm 0.3 \text{ nH}$	7	100	47	6000	0.05	500			
ELJRE1N2DF2	1.2				47	6000	0.06	500			
ELJRE1N5DF2	1.5		8		47	6000	0.07	500			
ELJRE1N8DF2	1.8				45	6000	0.08	500			
ELJRE2N2DF2	2.2		9		35	6000	0.09	500			
ELJRE2N7DF2	2.7				35	6000	0.10	500			
ELJRE3N3DF2	3.3				35	5500	0.12	500			
ELJRE3N9JF2	3.9		± 5 %		36	5500	0.15	450			
ELJRE4N7JF2	4.7				36	4800	0.17	450			
ELJRE5N6JF2	5.6				36	4600	0.18	430			
ELJRE6N8JF2	6.8				36	3550	0.20	430			
ELJRE8N2JF2	8.2				36	3500	0.28	400			
ELJRE10NJF2	10				37	2800	0.32	400			
ELJRE12NJF2	12				37	2800	0.35	400			
ELJRE15NJF2	15				38	2500	0.41	350			
ELJRE18NJF2	18				39	2300	0.45	350			
ELJRE22NJF2	22				40	2000	0.50	300			
ELJRE27NJF2	27		11		41	2000	0.55	300			
ELJRE33NJF2	33				40	1800	0.60	300			
ELJRE39NJF2	39				39	1800	0.80	300			
ELJRE47NJF2	47				38	1800	0.95	250			
ELJRE56NJF3	56				35	1800	1.2	250			
ELJRE68NJF3	68	12			35	1500	1.3	250			
ELJRE82NJF3	82				33	1500	1.5	250			
ELJRER10JF3	100				30	1300	1.8	200			
ELJRER12JF3	120	5			25	1200	3.0	130			
ELJRER15JF3	150				22	1100	4.5	100			
ELJRER18JF3	180				20	1000	6.5	80			
ELJRER22JF3	220				—	900	7.5	70			

\*1 : Self Resonant Frequency \*2 : DC Resistance

### ■ Q-Frequency Characteristics

Type: 1608 (0603) RE



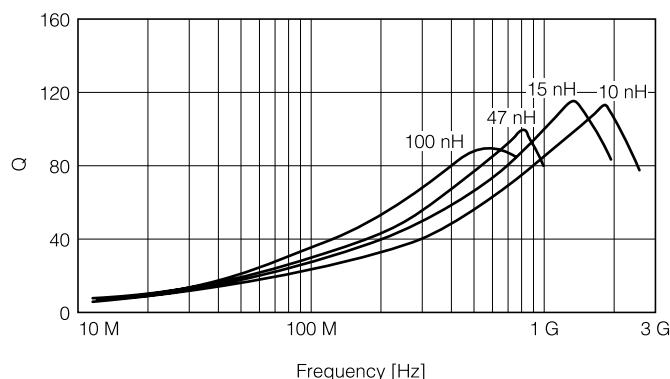
### ■ Examples : Type 2012(0805)ND

Part No.	Inductance		Q min.	L , Q Test-Freq. ( MHz)	Q Typical (800 MHz)	SRF *1 min.(MHz)	DCR *2 max.(Ω)	DC Current max.(mA)			
	nH	Tolerance									
ELJND10NKF	10	± 10 %	10	100	72	3300	0.18	540			
ELJND12NKF	12				67	3300	0.24	535			
ELJND15NKF	15				73	3000	0.24	520			
ELJND18NKF	18				74	3000	0.29	480			
ELJND22NKF	22				75	2600	0.29	465			
ELJND27NKF	27		15		73	2500	0.34	455			
ELJND33NJ/KF	33	± 5 % ± 10 %			80	2050	0.39	395			
ELJND39NJ/KF	39				72	2000	0.41	390			
ELJND47NJ/KF	47				71	1650	0.46	385			
ELJND56NJ/KF	56				63	1550	0.51	360			
ELJND68NJ/KF	68				57	1450	0.57	340			
ELJND82NJ/KF	82	25.2			56	1100	0.63	330			
ELJNDR10J/KF	100				51	800	0.86	285			
ELJNDR12J/KF	120				32	600	0.99	275			
ELJNDR15J/KF	150				36	600	1.47	230			
ELJNDR18J/KF	180				34	600	1.61	195			
ELJNDR22J/KF	220				—	500	1.84	170			
ELJNDR27J/KF	270				—	300	1.95	165			
ELJNDR33J/KF	330				—	200	2.16	160			
ELJNDR39J/KF	390				—	150	2.37	150			
ELJNDR47J/KF	470				—	150	2.56	145			
ELJNDR56J/KF	560				—	100	2.69	140			
ELJNDR68J/KF	680				—	100	3.02	130			
ELJNDR82J/KF	820				—	80	3.38	125			
ELJND1R0J/KF	1000	8	7.96	—	80	3.88	120				

\*1 : Self Resonant Frequency    \*2 : DC Resistance

### ■ Q-Frequency Characteristics

Type: 2012 (0805) ND



### ■ Examples : Type 2520(1008)NC

Part No.	Inductance		Q min.	L , Q Test Freq.( MHz)	SRF *1 min.(MHz)	DCR *2 max.(Ω)	DC Current max.(mA)	
	nH	Tolerance						
ELJNC10NKF	10	±10 %	10	100	2500	0.32	280	
ELJNC12NKF	12				2200	0.34	270	
ELJNC15NKF	15				1800	0.38	255	
ELJNC18NKF	18				1550	0.40	250	
ELJNC22NKF	22				1350	0.43	240	
ELJNC27NKF	27		15		1150	0.47	230	
ELJNC33NK/JF	33				1000	0.51	220	
ELJNC39NK/JF	39				890	0.55	215	
ELJNC47NK/JF	47				770	0.59	205	
ELJNC56NK/JF	56				670	0.63	200	
ELJNC68NK/JF	68	± 5 %	10	25.2	590	0.68	190	
ELJNC82NK/JF	82				520	0.73	185	
ELJNCR10K/JF	100				460	0.80	175	
ELJNCR12K/JF	120				400	0.87	170	
ELJNCR15K/JF	150				340	0.98	160	
ELJNCR18K/JF	180				300	1.05	155	
ELJNCR22K/JF	220				260	1.15	145	
ELJNCR27K/JF	270				230	1.25	140	
ELJNCR33K/JF	330				200	1.37	135	
ELJNCR39K/JF	390				180	1.47	130	
ELJNCR47K/JF	470				160	1.58	125	
ELJNCR56K/JF	560				145	1.70	120	
ELJNCR68K/JF	680				130	1.85	110	
ELJNCR82K/JF	820				100	2.10	100	

\*1 : Self Resonant Frequency \*2 : DC Resistance

### ■ Examples : Type 3225(1210)NA

Part No.	Inductance			Q		SRF *1 min.(MHz)	DCR *2 max.(Ω)	DC Current max.(mA)		
	μH	Freq. (MHz)	Tolerance	min.	Freq. (MHz)					
ELJNA47NMF	0.047	100	±20 %	100	25.2	680	0.20	450		
ELJNA56NMF	0.056					600	0.22	420		
ELJNA68NMF	0.068					540	0.25	400		
ELJNA82NMF	0.082					500	0.27	380		
ELJNAR10MF	0.10					450	0.30	360		
ELJNAR12MF	0.12	25.2		10		400	0.67	240		
ELJNAR15MF	0.15					350	0.72	230		
ELJNAR18MF	0.18					320	0.81	220		
ELJNAR22KF	0.22	±10 %	25.2			280	0.90	210		
ELJNAR27KF	0.27					250	1.0	200		
ELJNAR33KF	0.33					220	1.1	190		
ELJNAR39KF	0.39					200	1.2	180		
ELJNAR47KF	0.47					180	1.4	175		
ELJNAR56KF	0.56					160	1.5	170		
ELJNAR68KF	0.68					150	1.7	155		
ELJNAR82KF	0.82					135	1.9	145		
ELJNA1R0JF	1.0	1.0	± 5 %	13	7.96	120	2.1	125		
ELJNA1R2JF	1.2					110	2.3	120		
ELJNA1R5JF	1.5					95	2.7	115		
ELJNA1R8JF	1.8					85	3.0	110		
ELJNA2R2JF	2.2					80	3.2	110		
ELJNA2R7JF	2.7					70	3.6	105		
ELJNA3R3JF	3.3					62	4.2	100		
ELJNA3R9JF	3.9					57	4.4	95		
ELJNA4R7JF	4.7					52	7.7	70		
ELJNA5R6JF	5.6					46	8.7	65		
ELJNA6R8JF	6.8					42	10	60		
ELJNA8R2JF	8.2					38	11	60		

\*1 : Self Resonant Frequency \*2 : DC Resistance

Design, Specifications are subject to change without notice. Ask factory for technical specifications before purchase and/or use.  
Whenever a doubt about safety arises from this product, please inform us immediately for technical consultation without fail.

### 2. Normal Types FC, FA, SA, FB

■ Examples : Type 2520(1008)FC

Part No.	Inductance		Q min.	L , Q Test Freq.( MHz)	SRF *1 min.(MHz)	DCR *2 max.(Ω)	DC Current max.(mA)	
	μH	Tolerance						
ELJFCR22M/KF	0.22	±20 % ±10 %	25.2	25	230	0.70	190	
ELJFCR27M/KF	0.27				210	0.75	180	
ELJFCR33M/KF	0.33				190	0.85	170	
ELJFCR39M/KF	0.39				175	0.95	160	
ELJFCR47M/KF	0.47				160	1.0	155	
ELJFCR56M/KF	0.56				150	1.1	150	
ELJFCR68M/KF	0.68				135	1.25	140	
ELJFCR82M/KF	0.82				125	1.4	130	
ELJFC1R0K/JF	1.0	±10 % ± 5 %	7.96	25	115	0.65	195	
ELJFC1R2K/JF	1.2				100	0.75	180	
ELJFC1R5K/JF	1.5				90	0.85	170	
ELJFC1R8K/JF	1.8				85	0.95	160	
ELJFC2R2K/JF	2.2				80	1.05	155	
ELJFC2R7K/JF	2.7				75	1.2	145	
ELJFC3R3K/JF	3.3				65	1.3	135	
ELJFC3R9K/JF	3.9				60	1.4	130	
ELJFC4R7K/JF	4.7				55	1.55	125	
ELJFC5R6K/JF	5.6			2.52	50	1.75	120	
ELJFC6R8K/JF	6.8		20		45	1.95	115	
ELJFC8R2K/JF	8.2				40	2.2	105	
ELJFC100K/JF	10				32	3.5	80	
ELJFC120K/JF	12				30	3.8	75	
ELJFC150K/JF	15				28	4.4	70	
ELJFC180K/JF	18				25	5.0	65	
ELJFC220K/JF	22				22	5.8	60	
ELJFC270K/JF	27				21	6.3	115	
ELJFC330K/JF	33				20	7.1	110	
ELJFC390K/JF	39				18	9.5	90	
ELJFC470K/JF	47				17	11.0	80	
ELJFC560K/JF	56				16	12.1	75	
ELJFC680K/JF	68				15	16.6	70	
ELJFC820K/JF	82				13	19.0	65	
ELJFC101K/JF	100		15	0.796	12	21.0		

\*1 : Self Resonant Frequency    \*2 : DC Resistance

### ■ Examples : Type 3225(1210)FA

Part No.	Inductance		Q min.	L , Q Test Freq.( MHz)	SRF* <sup>1</sup> min.(MHz)	DCR * <sup>2</sup> max.(Ω)	DC Current max.(mA)
	μH	Tolerance					
ELJFAR22M/KF2	0.22	±20 % ±10 %	25	25.2	230	0.29	360
ELJFAR27M/KF2	0.27				210	0.32	345
ELJFAR33M/KF2	0.33				190	0.35	330
ELJFAR39M/KF2	0.39				175	0.39	305
ELJFAR47M/KF2	0.47				160	0.44	290
ELJFAR56M/KF2	0.56				150	0.49	275
ELJFAR68M/KF2	0.68				135	0.55	260
ELJFAR82M/KF2	0.82				125	0.61	245
ELJFA1R0K/JF2	1.0		30	7.96	115	0.69	230
ELJFA1R2K/JF2	1.2				100	0.75	215
ELJFA1R5K/JF	1.5				90	0.75	210
ELJFA1R8K/JF	1.8				85	0.82	200
ELJFA2R2K/JF	2.2				80	0.95	190
ELJFA2R7K/JF	2.7				75	1.1	180
ELJFA3R3K/JF	3.3				65	1.2	180
ELJFA3R9K/JF	3.9				60	1.3	175
ELJFA4R7K/JF	4.7				55	1.5	165
ELJFA5R6K/JF	5.6				50	1.6	160
ELJFA6R8K/JF	6.8	±10 % ± 5 %	2.52	0.796	45	1.8	150
ELJFA8R2K/JF	8.2				40	2.0	140
ELJFA100K/JF	10				36	2.1	140
ELJFA120K/JF	12				33	2.5	125
ELJFA150K/JF	15				30	2.8	120
ELJFA180K/JF	18				27	3.3	110
ELJFA220K/JF	22				25	3.7	105
ELJFA270K/JF	27				22	5.0	90
ELJFA330K/JF	33				20	5.6	85
ELJFA390K/JF	39				20	6.4	80
ELJFA470K/JF	47				15	7.0	75
ELJFA560K/JF	56				15	8.0	70
ELJFA680K/JF	68				15	9.0	65
ELJFA820K/JF	82				11	10	60
ELJFA101K/JF	100	20	0.796	0.796	10	10	60
ELJFA121K/JF	120				10	11	55
ELJFA151K/JF	150				8	15	50
ELJFA181K/JF	180				7	17	50
ELJFA221K/JF	220				7	21	45

\*1 : Self Resonant Frequency    \*2 : DC Resistance

### ■ Examples : Type 3225(1210)SA

Part No.	Inductance			Q		SRF* <sup>1</sup> min.(MHz)	DCR* <sup>2</sup> max.(Ω)	DC Current max.(mA)
	μH	Freq. (MHz)	Tolerance	min.	Freq. (MHz)			
ELJSA100KF	10	1.0	± 10 %	40	5.0	30	1.8	18
ELJSA120KF	12					28	2.0	17
ELJSA150KF	15					25	2.2	15
ELJSA180KF	18					23	2.5	13
ELJSA220KF	22					20	2.8	12
ELJSA270KF	27					18	3.2	10
ELJSA330KF	33					17	3.5	10
ELJSA390KF	39					15	3.8	9
ELJSA470KF	47					14	4.0	8
ELJSA560KF	56					13	4.5	7
ELJSA680KF	68	0.1	± 10 %	40	1.5	12	5.0	6
ELJSA820KF	82					11	6.0	6
ELJSA101KF	100					10	7.0	5
ELJSA121KF	120					9	8.0	5
ELJSA151KF	150					5	9.0	5
ELJSA181KF	180	0.1	± 5 %	40	0.796	5	11	5
ELJSA221KF	220					4	12	5
ELJSA271KF	270					4	14	5

\*1 : Self Resonant Frequency \*2 : DC Resistance

### ■ Examples : Type 4532(1812)FB

Part No.	Inductance			Q		SRF* <sup>1</sup> min.(MHz)	DCR* <sup>2</sup> max.(Ω)	DC Current max.(mA)
	μH	Freq. (MHz)	Tolerance	min.	Freq. (MHz)			
ELJFB101K/JF	100	0.1	± 10 %	40	2.52	6.7	8.8	105
ELJFB121K/JF	120					6.1	10	100
ELJFB151K/JF	150					5.5	11	95
ELJFB181K/JF	180					5.1	13	85
ELJFB221K/JF	220					4.5	13	85
ELJFB271K/JF	270				1.5	4.1	14	80
ELJFB331K/JF	330					3.7	16	75
ELJFB391K/JF	390					3.3	19	70
ELJFB471K/JF	470					3.3	31	55
ELJFB561K/JF	560					2.7	35	50
ELJFB681K/JF	680			30	0.796	2.5	39	50
ELJFB821K/JF	820					2.4	45	45
ELJFB102K/JF	1000					2.1	53	40

\*1 : Self Resonant Frequency \*2 : DC Resistance

### 3. High Power Types PE, PC, PA

#### ■ Examples : Type 1608(0603)PE

Part No.	Inductance		Q min.	L , Q Test Freq.( MHz)	SRF *1 min.(MHz)	DCR *2 max.(Ω)	DC Current max.(mA)	
	nH	Tolerance						
ELJPE2N2KF	2.2	$\pm 10\%$	8	100	6000	0.030	2.1	
ELJPE2N7KF	2.7				5500	0.030	2.1	
ELJPE3N3KF	3.3				5500	0.040	2.1	
ELJPE3N9KF	3.9				5200	0.040	2.1	
ELJPE4N7KF	4.7		9		4800	0.050	2.1	
ELJPE5N6KF	5.6				4600	0.055	2.1	
ELJPE6N8KF	6.8				4000	0.055	1.9	
ELJPE8N2KF	8.2				3500	0.060	1.7	
ELJPE10NKF	10				2800	0.065	1.4	
ELJPE12NKF	12				2500	0.080	1.3	
ELJPE15NKF	15				2200	0.100	0.9	
ELJPE18NKF	18				2000	0.120	0.8	
ELJPE22NKF	22				1800	0.150	0.7	

\*1 : Self Resonant Frequency \*2 : DC Resistance

#### ■ Examples : Type 2520(1008)PC

Part No.	Inductance		Q min.	L , Q Test Freq.( MHz)	SRF *1 min.(MHz)	DCR *2 max.(Ω)	DC Current max.(mA)	
	μH	Tolerance						
ELJPC1R0MF	1.0	$\pm 20\%$	10	7.96	95	0.45	475	
ELJPC1R5MF	1.5				85	0.55	435	
ELJPC2R2MF	2.2				65	0.65	390	
ELJPC3R3MF	3.3		8		55	0.85	340	
ELJPC4R7MF	4.7				43	1.2	285	
ELJPC6R8KF	6.8		8.5		44	1.3	170	
ELJPC100KF	10				32	2.2	210	
ELJPC120KF	12				25	2.7	195	
ELJPC150KF	15				21	3.2	175	
ELJPC220KF	22		20	2.52	18	4.0	160	
ELJPC330KF	33				16	6.5	120	

\*1 : Self Resonant Frequency \*2 : DC Resistance

### ■ Examples : Type 3225(1210)PA

Part No.	Inductance		Q min.	L , Q Test Freq.( MHz)	SRF* <sup>1</sup> min.(MHz)	DCR* <sup>2</sup> max.(Ω)	DC Current max.(mA)
	μH	Tolerance					
ELJPA1R0MF	1.0	±20 %	7	7.96	150	0.15	600
ELJPA1R5MF	1.5				110	0.18	550
ELJPA2R2MF	2.2				80	0.23	500
ELJPA3R3MF	3.3				58	0.28	400
ELJPA4R7MF	4.7				46	0.34	350
ELJPA6R8MF	6.8				38	0.42	300
ELJPA100KF	10	±10 %	15	2.52	23	0.50	240
ELJPA120KF	12				21	0.60	230
ELJPA150KF	15				18	0.74	220
ELJPA180KF	18				17	0.90	205
ELJPA220KF	22				15	1.15	185
ELJPA270KF	27				13	1.45	165
ELJPA330KF	33		20	0.796	12	1.65	155
ELJPA390KF	39				11	1.90	145
ELJPA470KF	47				9.5	2.25	135
ELJPA560KF	56				8.5	3.30	110
ELJPA680KF	68				7.5	3.70	105
ELJPA820KF	82				7.0	4.20	100
ELJPA101KF	100		20	0.796	6.5	5.00	90
ELJPA121KF	120				6.0	7.00	75
ELJPA151KF	150				5.5	8.00	70
ELJPA181KF	180				5.0	9.50	65
ELJPA221KF	220				4.0	11.0	60
ELJPA271KF	270				3.5	14.5	55
ELJPA331KF	330				3.0	16.0	50

\*1 : Self Resonant Frequency \*2 : DC Resistance

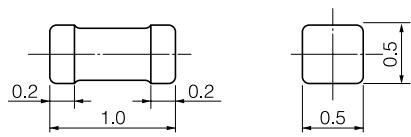
### 4. Low DC resistance Type EA

### ■ Examples : Type 3225(1210)EA

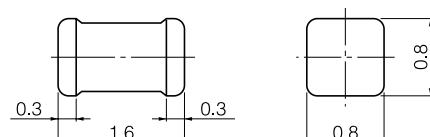
Part No.	Inductance		Q min.	L , Q Test Freq.( MHz)	SRF* <sup>1</sup> min.(MHz)	DCR* <sup>2</sup> max.(Ω)	DC Current max.(mA)
	μH	Tolerance					
ELJEA1R0MF	1.0	±20 %	7	7.96	100	0.09	500
ELJEA1R5MF	1.5				80	0.10	390
ELJEA2R2MF	2.2				65	0.13	350
ELJEA3R3MF	3.3				50	0.16	270
ELJEA4R7MF	4.7				46	0.18	240
ELJEA6R8MF	6.8				36	0.25	200
ELJEA100KF	10		10	2.52	29	0.34	160
ELJEA150KF	15				25	0.42	145
ELJEA220KF	22				18	0.65	115
ELJEA330KF	33				16	0.91	95
ELJEA470KF	47				13	1.30	80
ELJEA680KF	68				10	1.95	60
ELJEA101KF	100		20	0.796	8.0	3.12	50
ELJEA151KF	150				7.0	4.03	45
ELJEA221KF	220				5.0	7.15	35
ELJEA331KF	330				4.0	9.23	30

\*1 : Self Resonant Frequency \*2 : DC Resistance

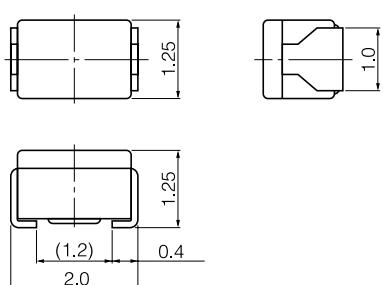
■ Dimensions in mm (not to scale)



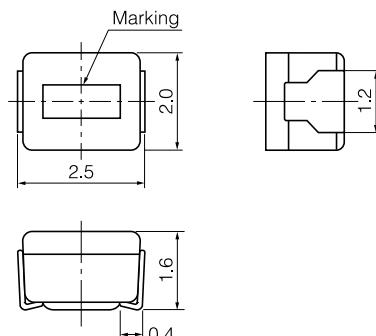
Type RF  
( $1.0 \times 0.5 \times 0.5$ )



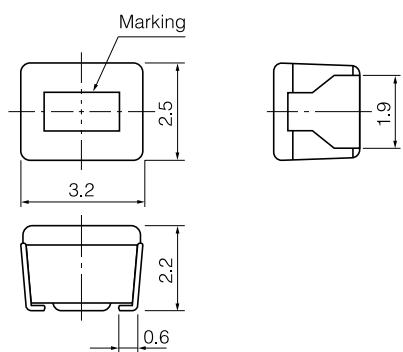
Type RE, PE  
( $1.6 \times 0.8 \times 0.8$ )



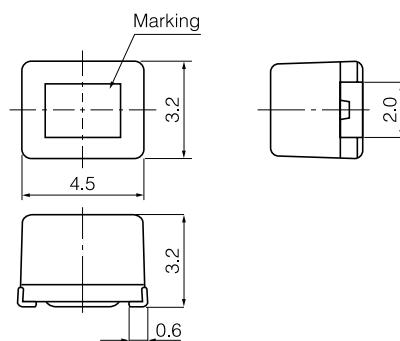
Type ND  
( $2.0 \times 1.25 \times 1.25$ )



Types FC, NC, PC  
( $2.5 \times 2.0 \times 1.6$ )

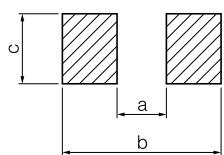


Types FA, SA, NA, PA, EA  
( $3.2 \times 2.5 \times 2.2$ )



Type FB  
( $4.5 \times 3.2 \times 3.2$ )

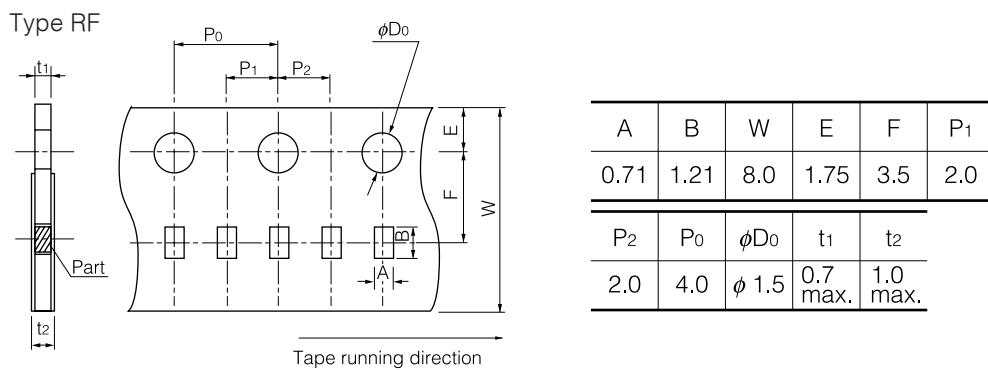
■ Recommended Land Pattern in mm (not to scale)



Type	a	b	c
RF	0.5~0.6	1.5~1.7	0.5~0.6
□E	0.8~1.0	2.0~2.6	0.7~0.9
ND	1.0~1.2	3.0~3.8	0.9~1.3
□C	1.4~1.5	3.5~4.0	1.2~1.6
□A	1.6~2.0	4.0~4.6	1.9~2.4
FB	2.4~2.6	5.5~6.0	2.0~3.0

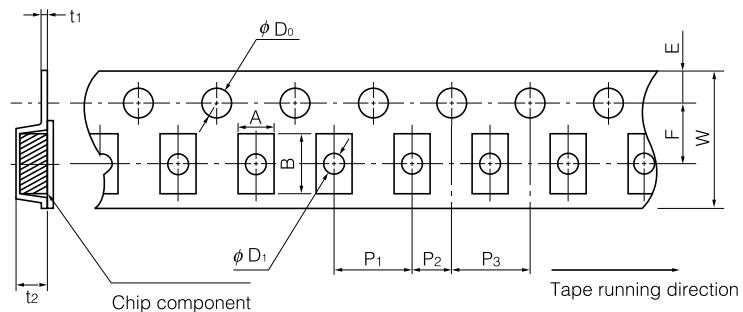
□E: RE, PE   □C: NC, FC, PC   □A: NA, FA, SA, PA, EA

■ Paper Tape Dimensions in mm (not to scale)

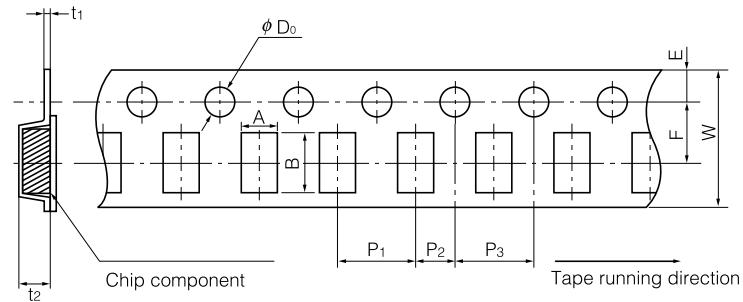


■ Embossed Carrier Tape Dimensions in mm (not to scale)

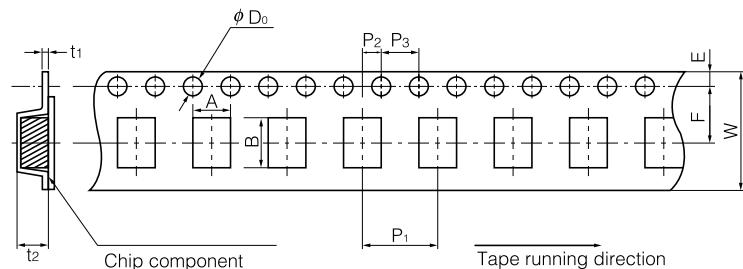
Types RE, PE, ND, NC, FC, PC (W=8 mm)



Types NA, FA, SA, PA , EA (W=8 mm)



Type FB (W=12 mm)



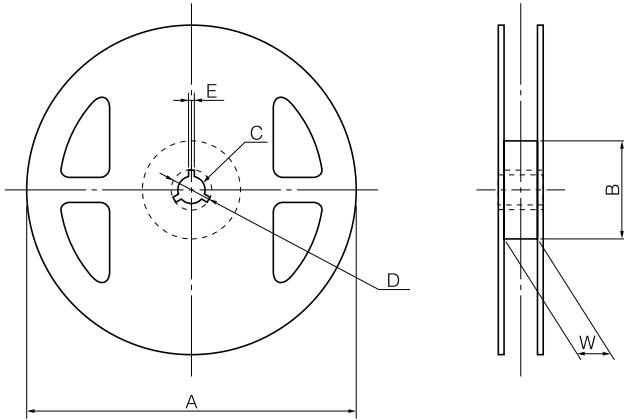
Size/Types		Dimensions		A	B	W	F	E	P <sub>1</sub>	P <sub>2</sub>	P <sub>3</sub>	ϕD <sub>0</sub>	ϕD <sub>1</sub>	t <sub>1</sub>	t <sub>2</sub>
1608(0603)	RE, PE	1.0	1.8	8	3.5	1.75	4.0	2.0	4.0	1.5	0.6	(0.27)	1.2		
2012(0805)	ND	1.45	2.25	8	3.5	1.75	4.0	2.0	4.0	1.5	1.0	(0.25)	1.55		
2520(1008)	NC, FC, PC	2.4	2.9	8	3.5	1.75	4.0	2.0	4.0	1.5	1.1	(0.25)	1.85		
3225(1210)	NA, FA, SA, PA, EA	2.8	3.6	8	3.5	1.75	4.0	2.0	4.0	1.5	—	(0.25)	2.4		
4532(1812)	FB	3.6	4.9	12	5.5	1.75	8.0	2.0	4.0	1.5	—	(0.3)	3.5		

### ■ Packaging Methods

#### ● Standard Packing Quantity and Mass

Quantity, Mass		Quantity	Mass (Weight) Approx.
Types			
RF		10000 pcs.	—
RE, PE, ND		3000 pcs.	90 g
NC, FC, PC		2000 pcs.	100 g
NA, FA, SA, PA, EA		2000 pcs.	170 g
FB		500 pcs.	100 g

### ■ Reel Dimensions in mm (not to scale)



Dimensions		A	B	C	D	E	W
Types							
RF		180	60	13	21	2	9
RE, PE, ND, NC, FC PC, NA, FA, SA, PA, EA		180	60	13	21	2	9
FB		180	60	13	21	2	13

### ⚠ Cautions for use

For securing upgraded reliability and safety, consider following caution items.

#### 1. Land pattern design

Refer to the recommended land dimensions of each type at flow and reflow solderings.

Avoid placing the chip inductor on any metal pattern except the land because the drop of Q and mutual conductance may occur.

Provisions for venting of flux gases should be made for high density assemblies.

#### 2. Mounting

Placement force should not exceed 20N because electric and magnetic characteristics change by applying strong force.

#### 3. Soldering

##### ① Flow soldering

Recommended conditions; 260 °C max., 5sec. max.(total time at 2 waves method)

##### ② Reflow soldering

###### ① Infra-red reflow soldering

Recommended conditions: 200 °C or high at electrode, 60sec. max. and peak 250 °C max., 5sec. max.

If the solder at the two electrodes are not melt simultaneously, the chip inductor may not be mounted on the right place.

It is recommended to fix by adhesive when the deviation is great.

###### ② VPS reflow soldering

Recommended conditions: 215±5 °C, 20 to 60sec.

#### 4. Cleaning

① Do not use acid or alkali agents. Some cleaning solvents out of CFC may damage the products.

Confirm the reliability in advance.

② If ultrasonic cleaning is employed, please inform us immediately for technical consultation.

#### 5. Instructions for applying current

The rated current is defined as the smaller value of either the current value when the inductance drops 10 % down from the initial point, or the current value when the average temperature of coil inside rises 20 K up from initial point.

Do not operate this coils beyond the specified rated current.

#### 6. Storage

① Be careful a high temperature, a large amount of moisture, gases and magnetic field.

② At long storage of more than 1 year, use the products after inspecting the outer structure